

# WEST Search History

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<input type="checkbox"/>	L17	(confidential\$ or private or privacy) same ((web site) or (web page)) same (monitor\$ or trace or tracing or track\$ or spy\$ or spied)	1
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END OF SEARCH HISTORY



US006446261B1

**(12) United States Patent**  
**Rosser**

(10) Patent No.: US 6,446,261 B1  
(45) Date of Patent: Sep. 3, 2002

(54) **SET TOP DEVICE FOR TARGETED ELECTRONIC INSERTION OF INDICIA INTO VIDEO**

(75) Inventor: **Roy J. Rosser, Princeton, NJ (US)**

(73) Assignee: **Princeton Video Image, Inc., Lawrenceville, NJ (US)**

(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **09/331,332**

(22) PCT Filed: **Dec. 17, 1997**

(86) PCT No.: **PCT/US97/23396**

§ 371 (c)(1),  
(2), (4) Date: **Jun. 17, 1999**

(87) PCT Pub. No.: **WO98/28906**

PCT Pub. Date: **Jul. 2, 1998**

**Related U.S. Application Data**

(60) Provisional application No. 06/034,517, filed on Dec. 20, 1996.

(51) Int. Cl.<sup>7</sup> ..... **H04N 7/10; H04N 7/025;**  
**H04N 7/20**

(52) U.S. Cl. ..... **725/34; 725/32; 725/35;**  
**725/64**

(58) Field of Search ..... **348/1, 2, 9, 581,**  
**348/465, 10, 12; 455/4.2, 2; 707/4; 725/2,**  
**9, 10, 13, 45, 46, 51, 32-36, 64; 705/10-14;**  
**709/217-219**

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*Primary Examiner*—Andrew Faile

*Assistant Examiner—Hai V. Tran*

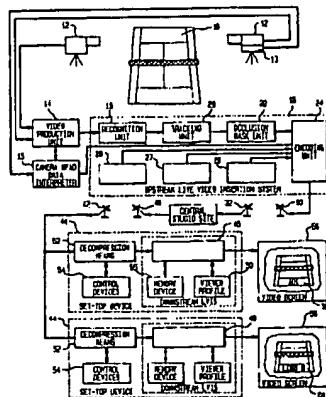
(74) *Attorney, Agent, or Firm*—Woodbridge & Associates, PC; Richard C. Woodbridge

(57)

## ABSTRACT

A method of anonymous targeted insertion of indicia into video broadcasts. Individual televisions or other video reception devices are associated with set-top boxes that monitor the usage and viewing habits of the television set or other video reception device. A viewer profile derived from data acquired from said monitoring is created wherein the viewer profile indicates certain characteristics about the viewer. This profile is transmitted to a centralized database, said centralized database being an intermediate link between the origin of the video broadcast and the end viewer. The purpose of the database is to link specific insertable indicia with matching specific viewer profiles. The insertable indicia are encoded directly into the broadcast video and re-broadcast to the end viewer where the set-top box decodes the broadcast video and performs insertion of the indicia. Thus, the system and method allow advertisers to target specific ads or indicia to specific viewing profiles.

**16 Claims, 4 Drawing Sheets**



First Hit    Fwd Refs  

L13: Entry 10 of 18

File: USPT

Sep 3, 2002

DOCUMENT-IDENTIFIER: US 6446261 B1

TITLE: Set top device for targeted electronic insertion of indicia into video

## CLAIMS:

13. A set-top device for sending and receiving data pertaining to television or video viewing in which a video signal having been transmitted by a video distribution mechanism is received by said device and modified prior to viewing by utilizing automatically selected video indicia or sequences which are stored locally on said set-top device, said device comprising: means local to the user for monitoring the usage of a television or video viewing device; means local and private to the user for automatically creating a continuously updated viewer profile based upon the cumulative data acquired by said monitoring means, wherein said means for automatically creating a viewer profile further comprises analysis of the user's accesses to web-sites when browsing the World Wide Web or other computer network.



US006138155A

**United States Patent [19]**

Davis et al.

[11] Patent Number: 6,138,155

[45] Date of Patent: Oct. 24, 2000

[54] **METHOD AND APPARATUS FOR TRACKING CLIENT INTERACTION WITH A NETWORK RESOURCE AND CREATING CLIENT PROFILES AND RESOURCE DATABASE**

[76] Inventors: **Owen Davis**, 214 W. 102nd St. #2A, New York, N.Y. 10025; **Vidyut Jain**, 352 6th Ave.-#3, Brooklyn, N.Y. 11215

[21] Appl. No.: 09/120,376

[22] Filed: Jul. 21, 1998

**Related U.S. Application Data**

[63] Continuation of application No. 08/821,534, Mar. 21, 1997, Pat. No. 5,796,952.

[51] Int. Cl.<sup>7</sup> ..... G06F 13/00

[52] U.S. Cl. ..... 709/224

[58] Field of Search ..... 364/DIG. 1, DIG. 2; 380/4; 709/200, 201, 202, 203, 224, 100, 300; 710/100; 712/205; 395/712

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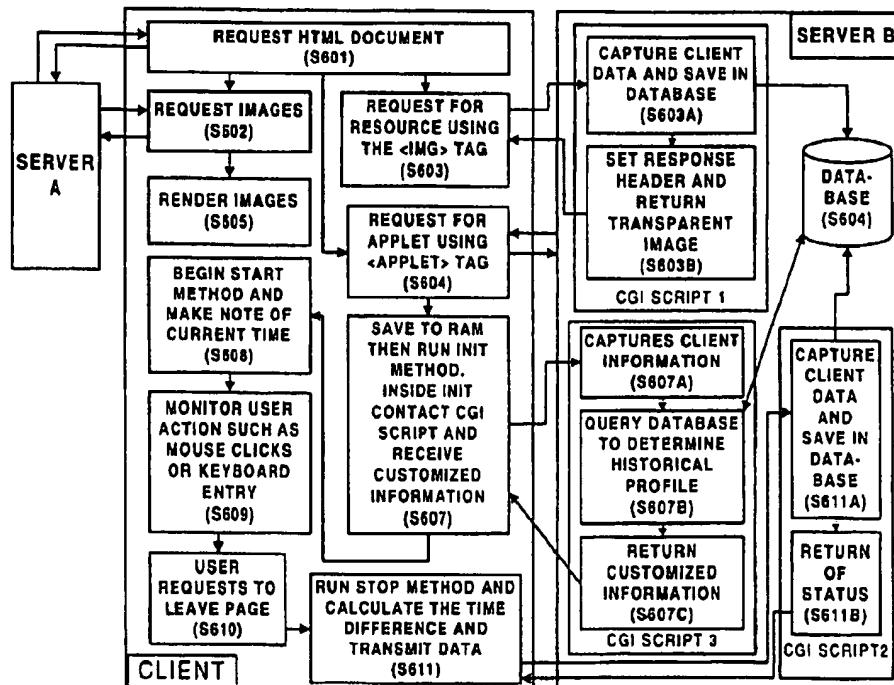
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*Primary Examiner—Robert B. Harrell  
Attorney, Agent, or Firm—Brown Raysman Millstein Felder & Steiner LLP*

**[57] ABSTRACT**

A method for monitoring client interaction with a resource downloaded from a server in a computer network includes the steps of using a client to specify an address of a resource located on a first server, downloading a file corresponding to the resource from the first server in response to specification of the address, using the client to specify an address of a first executable program located on a second server, the address of the first executable program being embedded in the file downloaded from the first server, the first executable program including a software timer for monitoring the amount of time the client spends interacting with and displaying the file downloaded from the first server, downloading the first executable program from the second server to run on the client so as to determine the amount of time the client interacts with the file downloaded from the first server, using a server to acquire client identifying indicia from the client, and uploading the amount of time determined by the first executable program to a third server. The first executable program may also monitor time, keyboard events, mouse events, and the like, in order to track choices and selections made by a user in the file, and may execute upon the occurrence of a predetermined event, as well as monitoring or determining the amount of information downloaded by the client.

53 Claims, 7 Drawing Sheets



First Hit**End of Result Set**  

L17: Entry 1 of 1

File: DWPI

Oct 24, 2000

DERWENT-ACC-NO: 2001-158052

DERWENT-WEEK: 200350

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TITLE: Tracking of client interaction with network resource, involves downloading resource from one server along with resource use monitoring program stored in another server, to client

Basic Abstract Text (2):

USE - For tracking client interaction with network resource such as web page or ad banner and client profiles and resource database. Also for use in LAN, internet, on-line subscription service, on-line database service, private networks, public networks.



US006115709A

**United States Patent [19]**

Gilmour et al.

[11] Patent Number: 6,115,709

[45] Date of Patent: Sep. 5, 2000

[54] **METHOD AND SYSTEM FOR CONSTRUCTING A KNOWLEDGE PROFILE OF A USER HAVING UNRESTRICTED AND RESTRICTED ACCESS PORTIONS ACCORDING TO RESPECTIVE LEVELS OF CONFIDENCE OF CONTENT OF THE PORTIONS**

[75] Inventors: David L. Gilmour, Los Altos Hills; Hua-Wen Wang, Milpitas, both of Calif.

[73] Assignee: Tacit Knowledge Systems, Inc., Palo Alto, Calif.

[21] Appl. No.: 09/157,092

[22] Filed: Sep. 18, 1998

[51] Int. Cl.<sup>7</sup> G06F 17/30

[52] U.S. Cl. 707/9; 707/5; 707/6; 707/10; 705/7; 713/200

[58] Field of Search 707/9, 10, 1-2, 707/104; 709/217-219; 705/14, 26, 35-37; 713/200-202

[56] References Cited

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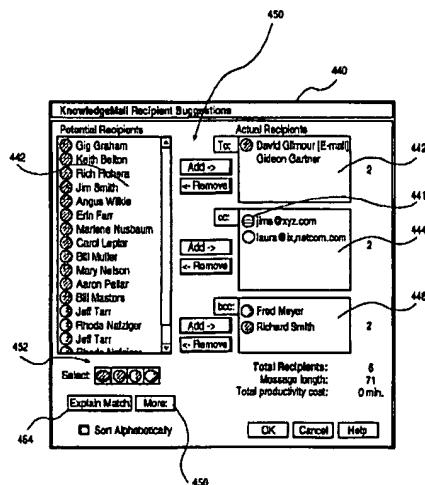
Primary Examiner—Hosain T. Alam

Attorney, Agent, or Firm—Blakely, Sokoloff, Taylor & Zafman, LLP

[57] ABSTRACT

A method of constructing a user knowledge profile, having distinct public and private portions with different access restrictions, requires assigning a confidence level to content within an electronic document. The electronic document is associated with a user, such as for example the author of the document. The content may be potentially indicative of a knowledge base of the user. The content is then stored in either the public or private portion of the user knowledge profile dependent upon whether the confidence level exceeds, or falls below, a predetermined threshold level. The public portion of the user knowledge profile is freely accessible by third parties, whereas the private portion has restricted access.

67 Claims, 32 Drawing Sheets



First Hit    Fwd Refs **Generate Collection** 

L13: Entry 17 of 18

File: USPT

Sep 5, 2000

DOCUMENT-IDENTIFIER: US 6115709 A

**\*\* See image for Certificate of Correction \*\***

TITLE: Method and system for constructing a knowledge profile of a user having unrestricted and restricted access portions according to respective levels of confidence of content of the portions

Detailed Description Text (112):

FIG. 19 is a flow chart illustrating a method 500, according to one exemplary embodiment of the present invention, of managing user authorization to publish, or permit access to, a user knowledge profile. The method 500 is executed by the case controller 45A that tracks open "cases" and initiates notification to users concerning the status of such cases. For the purposes of the present specification, the term "case" may be taken to refer to a user authorization process for publication of, or access to, a user knowledge profile. The method 500 commences at step 502, and then proceeds to step 504, where a match is detected with a private portion of a user knowledge profile. At step 504, the case controller 45A then opens a case, and notifies the target user at step 506 concerning the "hits" or matches between a document (or query) term and a knowledge term in a knowledge user profile. This notification may be by way of an e-mail message, or by way of publication of information on a Web page accessed by the user. At step 508, the case controller 45A determines whether an expiration date, by which the target user is required to respond to the hit, has been reached or in fact passed. If the expiration date has passed, the case controller 45A closes the case and the method 500 terminates. Alternatively, a determination is made at decision box 510 as to whether the target user has responded to the notification by authorizing publication of, or access to, his or her user knowledge profile based on the hit on the private portion thereof. If the target user has not authorized such action (i.e., declined authorization), an inquiring user (e.g., the author user of an e-mail or a user performing a manual database search to locate an expert) is notified of the decline at step 512. Alternatively, should the target user have authorized publication or access, the inquiring user is similarly notified of the authorization at step 514. The notification of the inquiring user at steps 512 or 514 may be performed by transmitting an e-mail to the inquiring user, or by providing a suitable indication on a web page (e.g., a home page or search/query web page) accessed by the inquiring user. At step 516, the appropriate portions of the user profile pertaining to the target user are published to the inquiring user, or the inquiring user is otherwise permitted access to the user profile. At step 518, the case controller 45A then closes the case, whereafter the method terminates.

L13: Entry 17 of 18

File: USPT

Sep 5, 2000

DOCUMENT-IDENTIFIER: US 6115709 A

**\*\* See image for Certificate of Correction \*\***

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US005966705A

# United States Patent [19]

Koneru et al.

[11] Patent Number: 5,966,705

[45] Date of Patent: Oct. 12, 1999

[54] **TRACKING A USER ACROSS BOTH SECURE AND NON-SECURE AREAS ON THE INTERNET, WHEREIN THE USERS IS INITIALLY TRACKED USING A GLOBALLY UNIQUE IDENTIFIER**

[75] Inventors: Sudheer Koneru, North Bend; Michael H. Tuchen, Seattle, both of Wash.

[73] Assignee: Microsoft Corporation, Redmond, Wash.

[21] Appl. No.: 08/885,324

[22] Filed: Jun. 30, 1997

[51] Int. Cl.<sup>6</sup> ..... G06F 17/30

[52] U.S. Cl. .... 707/9; 707/10; 375/200.33

[58] Field of Search ..... 707/1, 10, 9, 3,  
707/104, 2, 6, 7, 8, 100, 102, 200, 201,  
501, 513; 395/200.32, 683, 187.01, 188.01,  
200.57, 200.54, 200.59, 200.33; 380/23,  
29

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Primary Examiner—Paul R. Lintz

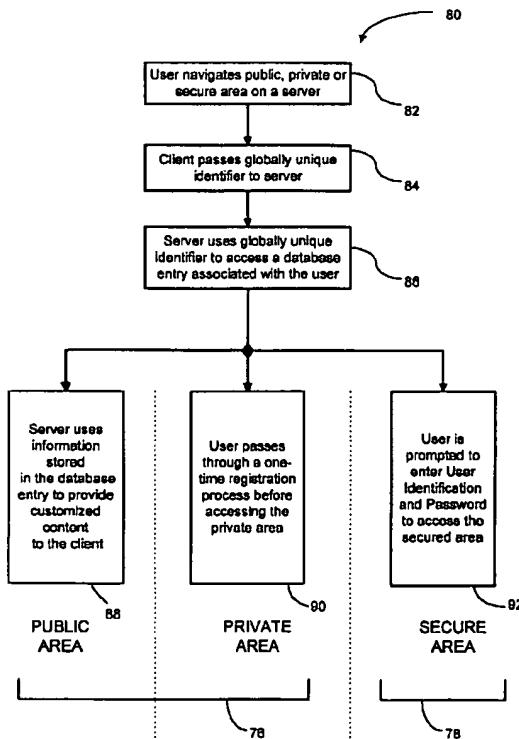
Assistant Examiner—Srirama Channavajjala

Attorney, Agent, or Firm—Klarquist Sparkman Campbell Leigh & Whinston, LLP

[57] ABSTRACT

A system and method is disclosed for tracking a user across both secure and non-secure areas on an Internet and/or Intranet site. In one aspect of the system and method, when a user first accesses a non-secure area, such as a public area, the user is assigned a token, such as a globally-unique identifier (GUID). The token is used as a key to a database entry on a server computer for tracking the user in non-secure areas. When the user first accesses a secure area, the user is prompted to enter a user identification and a password. The user identification is then used as the key to the database entry, rather than the token. The server then uses the user identification to track the user across both secure and non-secure areas.

25 Claims, 5 Drawing Sheets



First Hit    Fwd Refs**End of Result Set** **Generate Collection** 

L13: Entry 18 of 18

File: USPT

Oct 12, 1999

DOCUMENT-IDENTIFIER: US 5966705 A

**\*\* See image for Certificate of Correction \*\***

TITLE: Tracking a user across both secure and non-secure areas on the Internet, wherein the users is initially tracked using a globally unique identifier

Brief Summary Text (8):

In some situations, users that are accessing sites also desire security so that they are not impersonated by other users. For example, many sites are storing information relating to a user's browsing characteristics, such as what links the user activated, how often the user accesses the site, and how long the user remained on a particular web page. Additionally, sites may store customization information. For example, a document may be displayed to the user having customization options relating to news, sports, entertainment, etc. Based on the options the user selects, the document only displays content related to those selected options. Moreover, the site retains the user-selected options so that the customization information is re-displayed when the user re-accesses the same document at a later time. Storing information relating to user activity or storing customization information for a user is called "tracking" a user. Users want to ensure that a site is not tracking an impersonator of the user, thereby providing the impersonator with access to the user's private customization options.

L13: Entry 18 of 18

File: USPT

Oct 12, 1999

DOCUMENT-IDENTIFIER: US 5966705 A

**\*\* See image for Certificate of Correction \*\***

TITLE: Tracking a user across both secure and non-secure areas on the Internet, wherein the users is initially tracked using a globally unique identifier

Brief Summary Text (8):

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